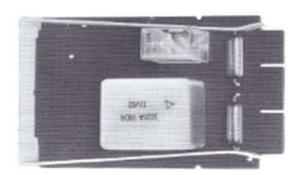
# **401A KEY TELEPHONE UNIT**

# IDENTIFICATION, INSTALLATION, CONNECTIONS, AND MAINTENANCE

## 1. GENERAL

1.01 The 401A key telephone unit (KTU) provides for manual intercom service in the 1A2 key telephone system (Fig. 1).



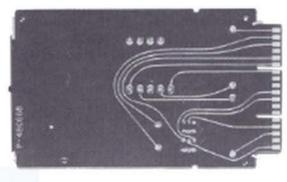


Fig. 1 - 401A Key Telephone Unit

- 1.02 Talking battery is provided to the manual intercom circuit through resistors and the windings of an inductor mounted on the KTU. The resistors serve as current-limiting devices to protect the inductor from excessive current under trouble conditions.
- 1.03 The A lead of a station associated with the manual intercom circuit provides ground through the operated switch hook contacts to operate a relay on the 401A KTU. Operation of this relay completes a circuit for the line busy lamp feature if provided. In addition, the relay provides a spare set of transfer con-

tacts for miscellaneous control purposes as desired.

1.04 Audible signaling between stations having access to the 401A KTU circuit is accomplished by means of separately furnished pushbuttons, buzzers, etc.

#### 2. IDENTIFICATION

- 2.01 The 401A KTU is a plug-in epoxy-coated metal board onto which are mounted one MA-type miniature relay, an inductor, and two resistors.
- 2.02 The printed wiring interconnecting these components terminates at the plug-end of the board which is designed for inserting into a mounting receptacle of a 501-, 502-, 550 and 551-type key service unit, 583- and 584-type panel, or 259-type KTU.

## 3. INSTALLATION

3.01 The KTU has two slots on the plug-end of the board to ensure proper orientation (polarity of unit) when inserted into its mounting receptacle.

## 4. CONNECTIONS

- **4.01** See Fig. 2 for the lead designations assigned to the contacts on the plug-end of the KTU.
- 4.02 External wiring and cabling connections to this KTU may vary among the key service units or panels being used. Refer to appropriate sections of each for detailed information.

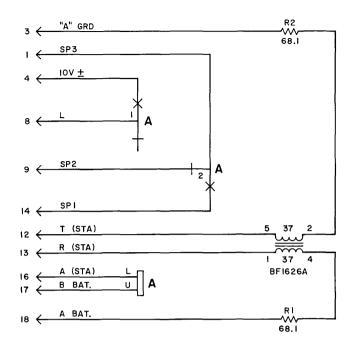


Fig. 2 — Functional Schematic Drawing of 401A KTU

# 5. MAINTENANCE

5.01 If trouble is encountered, exchange the suspected 401A KTU with one known to be working properly to determine if the trouble is in the KTU or external to it. If the KTU is proved defective, replace it with a good unit.

*Note:* Exercise care when inserting or removing the KTU to avoid damage to the printed wiring and other circuit components.

5.02 The miniature relay on the KTU is factory adjusted and field adjustments shall not be attempted. Do not remove the relay dust cover.



To avoid accidental damage, use blister pack when transporting or storing the 401A KTU. Over-pack when necessary.